Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KENNETH J. NIEHOFF

Appeal No. 2002-1184
Application No. 09/307,633

ON BRIEF

Before FRANKFORT, STAAB, and NASE, Administrative Patent Judges.

NASE, Administrative Patent Judge.

ON REQUEST FOR REHEARING

This is in response to the appellant's request for rehearing[1] of our decision mailed October 17, 2002, wherein we affirmed the decision of the examiner to reject claims 22 to 25 under 35 U.S.C. § 102(b); affirmed the decision of the examiner to reject claims 22 to 31 under 35 U.S.C. § 102(e); and affirmed the decision of the examiner to reject claims 22 to 31 under obviousness-type double patenting. The appellant asks for rehearing only

[1] Filed December 23, 2002.

with respect to our affirmance of the decision of the examiner to reject claims 26 to 31 under 35 U.S.C. § 102(e).

We have carefully considered the argument raised by the appellant in the request for rehearing, however, the argument does not persuade us that our decision was in error in any respect.

The argument (pp. 1-4) raised by the appellant is that the Board's "belief" and "opinion" as set forth on pages 11-12 of our decision is not supported by the disclosure in the Reilly patent.[2] We do not agree.

On pages 11-12 of our decision we stated that

> The argument present by the appellant does not convince us that the subject matter of independent claims 22, 24, 26, 28 and 30 is novel. It is our determination that the physical indicia language of claim 22 (i.e., physical indicia on said syringe related to the capacity of said syringe), the physical indicia language of claim 24 (i.e., physical indicia on said syringe related to the distance of the plunger from an end of said syringe when said syringe is initially installed on said injector), the physical indicia language of claim 26 (i.e., physical indicia on said syringe related to the amount of fluid in the pre-filled syringe), the physical indicia language of claim 28 (i.e., physical indicia on said syringe related to the end of travel position of an injector ram coupled to the plunger when the syringe is coupled to an injector), and the physical indicia language of claim 30 (i.e., physical indicia on said syringe related to the range of travel of an injector ram coupled to the plunger when the syringe is coupled to an injector), are "readable on" the longitudinally spaced ribs

[2] U.S. patent No. 5,383,858.

on the Reilly syringe which function as volumetric gradations. For example, it is our view that the rightmost rib 74 shown in Figure 5 of Reilly is related to both the capacity of the syringe and the distance of the plunger from an end of the syringe when the plunger is adjacent the rightmost rib 74 shown in Figure 5 of Reilly. Clearly, one skilled in this art would understand the volumetric rib gradations shown on the Reilly syringe to indicate various positions of the plunger within the syringe and thus related filled volumes (i.e., capacity of that filled syringe). Likewise, it is our **belief** that the rib 74 proximate to the plunger in a pre-filled syringe is related to the amount of fluid in the pre-filled syringe. Similarly, it is our **opinion** that the rib 74 proximate to the location of the plunger in a syringe is both related to the end of travel position of an injector ram coupled to the plunger when the syringe is coupled to an injector and to the range of travel of an injector ram coupled to the plunger when the syringe is coupled to an injector. [Emphasis added]

Prior to that statement, we determined that

Reilly's invention relates to a front-loading medical injector and a syringe for use therewith, and more particularly to a front-loading medical injector apparatus wherein a syringe of special construction is mountable upon and removable from a front wall of an injector housing by a first readily releasable mechanism, while a plunger in the syringe is simultaneously connected to or dissembled from an injector drive member by a second readily releasable mechanism. Figure 1 of Reilly discloses an injector apparatus 20 and a syringe 22. The syringe 22 comprises an elongated main tubular body or barrel 32 and a coaxial discharge injection section 34, interconnected by an intermediate conical portion 36. A plunger 38 is slidably positioned within the tubular body 32 and is connectable to an actuating mechanism 40 in the injector apparatus 20. Reilly teaches (column 7, lines 2-10) that

> the wall of the syringe 22 may be formed of polypropylene reinforced by providing a series of annular ribs 74 on the tubular body 32 of the syringe in longitudinally spaced relationship. Further, by suitably spacing the ribs 74 along the length of the tubular body 32, such as in equal increments, the ribs also can perform the dual function of serving as volumetric gradations for the purpose of indicating the amount of contrast media in the syringe 22.

With reference to Figure 2, Reilly further teaches (column 6, lines 31-65) that

> a system 67 for transmitting syringe information from the syringe 22 to an injector controller 68, illustrated in phantom lines in FIG. 1, while attaching the syringe to the injector housing front wall mounting assembly 23, also is provided. In this instance, the system 67 comprises an encoding device 70, such as a bar code having spaced bars 70b and located on the syringe 22, and a sensor 72 located on the injector 27, as for example, in a second one of the connector assembly retaining flanges 23f. Then, as the syringe 22 is rotated into its mounted position, the sensor 72 reads the encoding device 70 and forwards associated signals to the injector controller 68, which then interprets the signals and modifies the function of the injector apparatus 20 accordingly. Examples of the information which could be encoded on the encoding device 70 include dimensions of the syringe 22, content of the syringe in the case of a pre-filled syringe, manufacturing information such as lot numbers, dates and tool cavity number, recommended contrast media flow rates and pressures, and loading/injection sequences. As an alternative to the encoding device 70 being a bar code with spaced bars 70b, the encoding device also could include raised surfaces 70s corresponding to the spaced bars, which then would be read by a suitable injector sensor 72 in a similar manner, as the syringe 22 is mounted on the injector housing front wall 24. In addition to the encoding device 70, one may also use mechanically readable devices, e.g. a slot, hole, or projection on the syringe 22 or plunger 38 to register against a switch on the mounting assembly 23, or alternatively an optically readable device, e.g. characters, dots and other geometric shapes, that will send information concerning the type of syringe used to the intelligent circuits of the injector.

Our "belief" and "opinion" as set forth on pages 11-12 of our decision is supported by the disclosure in the Reilly patent noted above. In that regard, while the appellant is correct that Reilly does not specifically teach that any rib 74 correlates exactly with the fully-rearward position of the plunger (i.e., when the syringe is filled to its maximum capacity), it is our view that the rightmost rib 74 shown in Figure 5 of Reilly is related to both the maximum capacity of the syringe and the distance of the plunger from an end of

the syringe when the plunger is adjacent the rightmost rib 74 shown in Figure 5 of Reilly. In addition, it remains our determination that one skilled in this art would understand the volumetric rib gradations shown on the Reilly syringe to indicate various positions of the plunger within the syringe and thus related filled volumes (i.e., each rib indicates a certain volumetric capacity of the syringe when the plunger is adjacent that rib). Likewise, it is our position that the rib 74 proximate to the plunger in a pre-filled syringe is related to the amount of fluid in the pre-filled syringe (e.g., the rightmost rib 74 shown in Figure 5 of Reilly is related to the maximum capacity of the syringe; the fifth rib 74 from the intermediate conical portion 36 shown in Figure 5 of Reilly is related to the pre-filled capacity of the syringe when the pre-filled syringe has the plunger 34 adjacent that rib). Finally, it continues to be our opinion that the rib 74 proximate to the location of the plunger 38 in the syringe of Reilly is both related to the end of travel position of an injector ram coupled to the plunger when the syringe is coupled to an injector and to the range of travel of an injector ram coupled to the plunger when the syringe is coupled to an injector.

In light of the foregoing, the appellant's request for rehearing is granted to the extent of reconsidering our decision, but is denied with respect to making any change thereto.

No period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REQUEST FOR REHEARING - DENIED

CHARLES E. FRANKFORT
Administrative Patent Judge

LAWRENCE J. STAAB
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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WOOD, HERRON & EVANS, LLP
2700 CAREW TOWER
441 VINE STREET
CINCINNATI, OH 45202-2917

JVN/jg